

for Classes A, B, ~~C~~, and S, and Categories 1, 2, and 3 EPIRB stations.

§ 80.1061 Throughout this section and elsewhere in Part 80, satellite EPIRBs are identified as operating on the 406.025 MHz uplink frequency. The COSPAS-SARSAT Council at its 24th session decided to migrate new satellite EPIRB production to 406.028 MHz in order to prevent saturation of the 406.025 frequency. In the future, additional frequencies could be made available in 3 kHz steps within the 406 – 406.1 MHz band. The USCG therefore proposes that throughout this section and elsewhere in Part 80, wherever 406.025 MHz EPIRBs are referred to generally, revise the reference to “406 MHz”. Where specific frequencies need to be identified, indicate the frequency band of 406 – 406.1 MHz. (as in § 80.1077, for example.)

§ 80.1061(a) Revise paragraph (a) to read as follows to include the current version of the RTCM standard for 406 MHz EPIRBs:

“(a) Notwithstanding the provisions in paragraph (b) of this section, 406 MHz EPIRBs manufactured, imported or sold in the United States [180 DAYS AFTER THE EFFECTIVE DATE OF THIS RULE] must meet all the technical and performance standards contained in the Radio Technical Commission for Maritime Services document titled “RTCM Recommended Standards for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs), Version 2.1, August 22, 2000” (RTCM Recommended Standards). This RTCM document is incorporated by reference in accordance with 5 U.S.C. 552(a). The document is available for inspection at Commission headquarters in Washington, DC or may be obtained from the Radio Technical Commission for Maritime Services, 1800 Diagonal Road, Suite 600, Alexandria, VA 22314. Phone 703-684-4481. Fax 703-684-4429; <http://www.rtcn.org>.”

§ 80.1061(c) and (d) Since the current RTCM Standards do not contain the COSPAS-SARSAT tests, the appropriate COSPAS-SARSAT standards should be cited. The authorization process should be streamlined by requiring an independent laboratory to verify compliance with RTCM standards, rather than the Coast Guard.

Revise paragraphs (c), (c)(1) and (d) as follows:

(c) As specified in the RTCM Recommended Standards, the EPIRB must meet COSPAS-SARSAT specifications. Prior to submitting a certification application for a 406 MHz radiobeacon, the radiobeacon must be certified by a test facility recognized by one of the COSPAS/SARSAT Partners. Additionally, the radiobeacon must be examined and tested by an independent laboratory accepted by the U.S. Coast Guard to certify that the equipment complies with the U.S. Coast Guard environmental and operational requirements associated with design characteristics in section 2.0, and the test procedures described in Appendix A of the RTCM Recommended Standards. Information regarding the

recognized test facilities may be obtained from Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street SW, Washington, DC 20593-0001. The COSPAS-SARSAT standards are incorporated by reference in accordance with 5 U.S.C. 552(a). The standards are available for inspection at Commission headquarters in Washington, DC or may be obtained from the COSPAS-SARSAT Secretariat, Inmarsat, 99 City Road, London EC1Y 1AX, UNITED KINGDOM.. Telephone +44 20 7728 1391; fax = +44 20 7728 1170; download: <http://www.cospas-sarsat.org/download/sysdocs.htm>

(1) After a 406 MHz EPIRB has been certified by the recognized test facilities the following information must be submitted ~~in duplicate~~ to the Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street SW, Washington, DC 20593-0001:

(i) The name of the manufacturer or grantee and model number of the EPIRB;

(ii) One copy of the certificate and test data obtained from the test facility recognized by a COSPAS/SARSAT Partner showing that the radiobeacon complies with the COSPAS/SARSAT standards;

(iii) One copy of the design examination record, test report, and test data obtained from the independent laboratory accepted by the U.S. Coast Guard showing that the radiobeacon complies with section 2.0 and Appendix A of the RTCM Recommended Standards; and

(iv) Two copies of instruction manuals associated with the radiobeacon, description of the test characteristics of the radiobeacon including assembly drawings, electrical schematics, description of parts list, specifications of materials and the manufacturer's quality assurance program.

(2) The material submitted under paragraph (c)(1) is for Coast Guard quality audit purposes. A Coast Guard review is not required prior to authorization. ~~After reviewing the information described in paragraph (c)(1) of this section the U.S. Coast Guard will issue a letter stating whether the radiobeacon satisfies all RTCM Recommended Standards.~~

(d) A certification application for a 406.025 MHz EPIRB submitted to the Commission must also contain –

- (1) a statement from the U.S. Coast Guard accepted laboratory stating whether copy of the U.S. Coast Guard letter that states the radiobeacon satisfies all RTCM Recommended Standards,
- (2) a statement from the manufacturer, grantee, or U.S. Coast Guard accepted laboratory stating whether the information in paragraph (c)(1) has been submitted to the Coast Guard,
- (3) a copy of the technical test data, and
- (4) the instruction manual(s).

Proposals have been made that the Inmarsat E EPIRB, recognized by IMO GMDSS regulations, be included in Subpart V. The USCG has no objection to including Inmarsat E in the Commission's rules, provided that the following requirements are met:

An Inmarsat E EPIRB must, alone or in conjunction with the system within which it functions:

- provide for locating (homing) on 121.5 MHz,
- include a strobe light which complies with RTCM Recommended Standards for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs), Version 2.1, August 22, 2000",
- require a suitable two-step means of activation which complies with the RTCM standard above,
- if intended for automatic activation, be designed to operate automatically only when the beacon is both out of its mounting bracket and submerged in water which complies with the RTCM standard above,
- be capable of providing regular non-manual position updates after the beacon floats free,
- have an associated registration database that fully complies with the data requirements of IMO Assembly Resolution A.887(21), and
- comply with IEC 61097-5 Ed. 1.0, Global maritime distress and safety system (GMDSS) - Part 5: Inmarsat-E - Emergency position indicating radio beacon (EPIRB) operating through the Inmarsat system - Operational and performance requirements, methods of testing and required test results.

In an Inmarsat E EPIRB is authorized in the U.S., § 80.1085(a)(6) should be amended to include annual tests for this device, as is required for 406 MHz EPIRBs.

Distress alert functions not recognized in Part 80.

Early this year it came to the attention of the Coast Guard that there are authorized marine radios capable of transmitting tones not recognized by Commission regulations on a distress frequency guarded by USCG watchstanders, that has potentially dangerous safety of life implications. Those radios transmitted an "SOS" signal on VHF channel 16. When notified of this problem, the Commission informed us that nothing in their regulations prohibits a manufacturer from introducing such a capability, despite safety problems such a feature could cause. While in this case the manufacturer has been cooperative in helping reduce the problem, there is nothing to prevent a less cooperative manufacturer from causing a similar or worse problem in the future. The USCG

therefore proposes that § 80.203 be amended as follows, to come into effect on the day a Report and Order is published.

“§ 80.203(m)(bis). No ship station shall include any device or provision capable of transmitting any tone or signal on a distress frequency for any purpose, unless specific provisions exist in these regulations authorizing such a tone or signal.”

Operator Licenses (Part 13 and Part 80)

The FCC's current regulations concerning GMDSS Radio Operator Licenses (§§ 13.7, 13.13, 13.17, and 13.201) are based upon Article S47 Section III of the ITU Radio Regulations, which require candidates to show proof of the technical and professional knowledge and qualification of certain GMDSS elements. The Commission implemented this requirement for GMDSS Radio Operator's License by examination, and proposes in this NPRM to do the same for the Restricted GMDSS Radio Operator License.

In 1995, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) was amended, in effect adding new qualification requirements for masters and mates of ships required to carry GMDSS equipment, as well as operators of that equipment. This Convention comes into effect on 1 February 2002. To meet STCW A-IV/1 requirements, persons must prove competence by examination and by practical demonstration of proficiency. A written examination is not sufficient to meet the requirements of this treaty. Masters and mates meeting this requirement must hold the FCC GMDSS Radio Operator's License and must also qualify for a US Coast Guard endorsement.

Although means exist in these provisions for meeting the requirements of the ITU Radio Regulations and the STCW Convention for masters and mates, no means exist for meeting STCW requirements for operators of GMDSS equipment on vessels subject to that Convention, who are not masters and mates. Unless this problem is resolved, the US will have no means for complying with that portion of the STCW Convention when it comes into force on 1 February 2002. The Coast Guard has not the means for endorsing FCC radio licenses, but has relied on the Commission for meeting radio licensing provisions of treaties to which the US is party.

If the STCW Convention, the ITU regulations and the Commission's regulations applied to the same categories of vessels, the FCC examination requirements could be eliminated as unnecessary, replaced by the STCW's demonstration of proficiency requirements. But as the STCW Convention was implemented in the US, they do not. Commercial fishing vessels over 300 grt, and passenger

vessels under 200 grt, for example, must carry GMDSS equipment under FCC regulations, but are not currently required to meet STCW requirements.

To resolve this problem, and allow the US to fully meet its STCW obligations, the Coast Guard proposes that §§ 13.7, 13.13, 13.17, and 13.201 be amended to designate two classes of GMDSS Radio Operator License (GROL). The First Class GROL would be met by persons who have successfully completed the 70-hour training program, including both theoretical examinations and practical demonstration of the candidate's ability to operate GMDSS equipment, who possess the relevant certificate of competency from a U.S. Coast Guard-approved training course. The Second Class GROL would be met by persons meeting the current provisions of § 13.201(b)(6). The First Class GROL would satisfy requirements of the STCW Convention, and the Second Class GROL would satisfy Commission requirements for GMDSS operators aboard GMDSS compulsory ships not subject to the STCW Convention.

This proposal should also resolve the duplication of effort problem requiring applicants to take two nearly identical theoretical exams, described in paragraph 39 of the NPRM.

The Coast Guard can support the Commission's proposal to establish a Restricted GMDSS Radio Operator License, but notes the same problems that affect the GROL affect that license as well. Support for this Restricted GROL is conditional upon resolving that problem. We therefore propose that a First Class Restricted GROL be established for those who possess the relevant certificate of competency from a U.S. Coast Guard-approved training course, once it is established. The Second Class Restricted GROL would be met by persons meeting Written Elements 1 and 7R as proposed by the Commission in § 13.201(b)(7).

§ 80.1067. The USCG believes those inspecting the GMDSS installation aboard ships should meet the stricter requirements specified in the STCW Convention, and proposes § 80.1067 be amended to include the First Class GROL. This stricter requirement is necessary since lives depend upon this equipment operating properly. Persons currently meeting the requirements of § 1067 should be given adequate time, such as 18 months from the time an FCC Order is adopted, to meet the stricter requirements.

§ 13.13: STCW Article VIII prohibits dispensations (i.e., permission to continue serving temporarily in a shipboard capacity without the appropriate and valid certificate) for radio personnel, except as may be permitted by the ITU Radio Regulations. Consequently, absent permission by the ITU Radio Regulations, §13.13 should be amended to reflect that the 90-day grace period cannot apply to seagoing ships to which STCW is applicable.

§ 80.1074(a): The USCG recommends that the Commission delete the last sentence from this provision. Merging of these functions (i.e., operator and maintainer) depends on workload implications for the crew. Having this provision in the FCC regulations would effectively preclude the OCMI from requiring these functions to be the responsibility of separate crew members.

§ 80.165 Operator requirements for voluntarily stations. The Coast Guard proposes the requirement for operators of ship earth stations on voluntarily equipped vessels to carry a Restricted Radiotelephone Operator Permit (RP) be eliminated, but retain footnote (1), that an RP is required for international voyage. No operator permit is required for operators of mobile earth stations, which are also used aboard ship, and yet do not provide the distress and safety telecommunications capability of ship earth stations. The existing requirement of an RP license is either ignored, or acts as a disincentive to obtain the type of mobile satellite station which might provide the user a higher degree of safety.

§ 13.201 and § 13.203. Restricted Radiotelephone Operator Permit (RP), Marine Radio Operator Permit (MP) and General Radiotelephone Operator License (G). In June 1999, the Commission began requiring all newly type accepted (certified) shipboard high frequency (HF) transceiver equipment have a minimum digital selective calling capability. However, operators of this equipment on voluntarily equipped vessels need only have an RP, an MP, or a G license, depending upon the power of the transmitter. None of these licenses includes an examination element having anything concerning digital selective calling, despite qualifying an operator to use DSC equipment. The RP requires no testing at all. The USCG proposes that appropriate DSC-related questions from 13.203 Element 7 be included in the MP and G licenses.

Survival craft radio equipment

Survival craft radio equipment on 500 kHz, 2182 kHz and 8364 kHz are no longer in use. The USCG therefore recommends the following amendments be made. Note changes consequential to USCG proposals above regarding the maintenance of radiotelegraphy requirements may supercede recommendations regarding 500 and 8364 kHz survival craft radio.

§ 80.99 Remove paragraph (b) and revise introductory paragraph as follows:

This section applies to coast and ship ~~and survival craft~~ stations authorized to transmit in the band 405-525 kHz.

§ 80.101 Remove paragraph (c).

§ 80.115 Revise paragraph (h) as follows:

(h) 2182 kHz silence periods. To facilitate the reception of distress calls, transmission by ship ~~or survival craft~~ stations is prohibited on any frequency (including 2182 kHz) within the band 2173.5-2190.5 kHz during each 2182 kHz silence period.

§ 80.143 Remove last sentence of paragraph (a).

§ 80.223 Remove paragraphs (a)(1), (a)(2), (a)(3), (b), and (c).

§ 80.263 Remove this section.

§ 80.265 Remove this section.

§ 80.267 Remove this section.

§ 80.271 As deadline dates in paragraphs (b), (c), and (d) have passed, revise the following paragraphs to read as follows:

(a) All portable survival craft radiotelephone transceivers that are used to satisfy the survival craft radiotelephone requirement must comply with the following:

Remove paragraphs (b), (c), and (d). Redesignate paragraph (e) as (b).

Remove the following sections:

§ 80.829

§ 80.830

§ 80.831

§ 80.832

§ 80.1095 Survival craft equipment. In the present construction, it is not clear what “alternatively” refers to. Proposed rewording makes it clear that the requirement for either two or three apparatus can be met by either fixed or portable equipment. Also, portable equipment stowed in survival craft, should meet the requirement for stowage in a location such that they can be rapidly placed in survival craft. Finally, the deadlines in the last sentence have passed, and it can be removed. The USCG proposes the following changes be made:

(a) At least three two-way VHF radiotelephone apparatus must be provided on every passenger ship and on every cargo ship of 500 tons gross tonnage and upwards. At least two two-way VHF radiotelephone apparatus must be provided on every cargo ship of between 300-500 tons gross tonnage. If portable, two-way VHF radiotelephones must be stowed in survival craft or in such locations that they can be rapidly placed in any survival craft other than liferafts required by Regulation III/26.1.4 of the SOLAS Convention. ~~Alternatively, survival craft may be fitted with a Fixed two-way VHF radiotelephone installations in survival craft may also be used to meet this requirement.~~ Two-way VHF radiotelephone apparatus, portable or fixed, must conform to performance standards as

~~specified in Sec. 80.1101. Two-way VHF radiotelephone apparatus provided on board ships prior to February 1, 1992, and not complying fully with the performance standards specified in Sec. 80.1101, may be used until February 1, 1999, provided it is compatible with approved two-way VHF radiotelephone apparatus.~~

Automatic Identification System (AIS)

In PR Docket No. 92-257, Third Report and Order, the Commission noted the "Automatic Identification Systems (AIS) and related safety systems, in support of its Ports and Waterways Safety System (PAWSS) project, which will provide Vessel Traffic Services (VTS) to facilitate the safe and efficient transit of vessel traffic to prevent collisions, groundings, and environmental damage associated with maritime accidents". The AIS is a VHF ship-ship/ship-shore transponder system using self-organizing time division multiple access (SOTDMA) techniques, which operates in the VHF maritime bands 156-162 MHz. AIS works in both VTS (ship-shore) and non-VTS (ship-ship) areas to provide ship traffic and other information heretofore not readily available to mariners. The 72nd Session of the International Maritime Organization Maritime Safety Committee, which met May 2000, approved provisions for AIS to be carried on ships subject to the Safety of Life at Sea (SOLAS) Convention on a phased basis beginning on July 1, 2002. The USCG plans to issue regulations necessary for the carriage of AIS on vessels in the US by about March 2001, with an effective carriage requirement date of July 1, 2002, but must rely on the Commission to adopt necessary certification regulations prior to these devices being carried on ships. Because AIS is a ship-ship system which may be voluntarily carried by any vessel, equipment certification is critical to ensure that every AIS equipment authorized in the U.S. on vessels operating in the nation's waterways remains interoperable and does not interfere with the proper operation of other AIS units installed on other vessels. The USCG must rely on the Commission to ensure AIS certification is carefully controlled and yet implemented in a timely manner. The Coast Guard is working internationally to achieve these same ends. IEC is developing a certification test standard (IEC 61993-2) which should be completed about June 2001. The USCG requests the Commission develop the necessary regulations to ensure that properly certified AIS equipment tested by an independent test facility is available to meet IMO and USCG vessel carriage regulations. USCG and FCC WTB staffs have met and will continue to meet to discuss means for meeting this requirement. To implement this, the following specific words are proposed:

§ 80.331 Special requirements for universal shipborne automatic identification systems (AIS).

(a) Universal shipborne automatic identification systems (AIS) must meet all the technical and performance standards contained in:

(i) International Maritime Organization Resolution MSC 74(69) Annex 3, Recommendation on Performance Standards for an Universal Shipborne Automatic Identification System (AIS),

(ii) International Telecommunications Union Recommendation ITU-R M.1371-1, Technical Characteristics for a Universal Shipborne Automatic Identification System Using Time Division Multiple Access in the VHF Maritime Mobile Band, and

(iii) International Electrotechnical Commission IEC 61993 – Maritime navigation and radiocommunication equipment and systems – Part 2: Universal shipborne automatic identification system – Performance requirements, methods and required test results.

(b) The AIS operates on the frequencies 161.975 MHz, 162.025 MHz, and 156.525 MHz, or as specified in § 80.371(c). When using AIS, mobile and fixed stations must use nine digit maritime mobile service identities.

(c) Prior to submitting a certification application for a universal shipborne automatic identification systems (AIS), the AIS equipment must be examined and tested by an independent laboratory accepted by the U.S. Coast Guard to certify that the equipment complies with the requirements and the test procedures described in 80.331(a)(iii). Information regarding the recognized test facilities may be obtained from Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street SW, Washington, DC 20593-0001. The standards may be obtained from the International Electrotechnical Commission, 3, rue de Varembé, P.O. Box 131, CH – 1211, GENEVA 20, Switzerland. Telephone: +41 22 919 02 11 Fax: +41 22 919 03 00. Internet <http://www.iec.ch>.

(1) After an AIS has been certified by the test facility the following information must be submitted to the Commandant (G-MSE), U.S. Coast Guard, 2100 2nd Street SW, Washington, DC 20593-0001:

(i) The name of the manufacturer or grantee and model number of the AIS;

(ii) One copy of the design examination record, test report, and test data obtained from the independent laboratory accepted by the U.S. Coast Guard showing that the AIS complies with § 80.331(a)(iii); and

(iii) Two copies of instruction manuals associated with the AIS, description of the test characteristics of the AIS including assembly drawings, electrical schematics, description of parts list, specifications of materials and the manufacturer's quality assurance program.

(2) The material submitted under paragraph (c)(1) is for Coast Guard quality audit purposes. A Coast Guard review is not required prior to authorization.

(d) A certification application for an AIS equipment submitted to the Commission must also contain –

- (i) a statement from the U.S. Coast Guard accepted laboratory stating whether the AIS meets all IEC standards,
- (ii) a statement from the manufacturer, grantee, or U.S. Coast Guard accepted laboratory stating whether the information in paragraph (d)(1) has been submitted to the Coast Guard,
- (iii) a copy of the technical test data, and
- (iv) the instruction manual(s).

The IMO Resolution described in the proposed § 80.331 (a)(i) has been adopted and is available at <http://www.navcen.uscg.mil/marcomms/imo/document.htm> in Report of MSC 69 Annex 1. The ITU Rec. M.1371-1 described in the proposed § 80.331(a)(ii) will be submitted to ITU in October 2000 for adoption by early 2001. The draft being submitted to ITU is available at <http://www.navcen.uscg.mil/marcomms/othrcoms/>. The IEC 61993-2 described in the proposed § 80.331(a)(iii) is being developed by IEC Technical Committee TC 80, and is expected to be completed by June 2001. A copy of the current draft standard can be provided as described in <http://www.navcen.uscg.mil/marcomms/cgcomms/iec.htm>.

In the PR 92-257 Third R&O, the Commission required the USCG and VHF Public Correspondence auction winner (MariTEL) to negotiate frequency channels for use by AIS. See § 80.371(c)(3). Negotiation is proceeding, and we expect to report back to the Commission in this matter shortly.

MariTEL and the Coast Guard will likely enter into an agreement that does not and cannot comply precisely with the terms of § 80.371(c)(3) for a variety of practical and technical reasons, but intends to comply with the understood intent of the regulation. For that reason, the USCG recommends this rule be amended to provide additional flexibility. This could be accomplished by amending the words “specifying up to two narrowband channel pairs offset 12.5 kHz from the channels set forth in the table in paragraph (c)(1)(i) of this section, or whatever arrangement is mutually agreed among the parties, for use with AIS”. § 80.371(c)(3) should be modified to include channels selected once these negotiations are completed.

Part III - Editorial corrections to the existing Part 80

The attachment (not available in the electronic edition submitted to the Commission) provides an annotated copy of Part 80 (current as of February 1, 2000) containing editorial changes reflecting either the Commission's tentative conclusions, adoption of recommendations contained in Part I of these comments, or simply editorial deletions to update the existing rules. No substantive recommendations are included in this attachment, except those proposed in Parts I and II above.

A handwritten signature in black ink, reading "J Hersey Jr." in a cursive script.

Joseph D. Hersey, Jr.
Chief, Spectrum Management Division
Office of Communication Systems
U.S. Coast Guard
By direction
August 22, 2000